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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,710	05/25/2006	Ichinori Takada	112857-559	5132
29175 7590 02/06/2009 BELI., BOYD & LLOYD, LLP P. O. BOX 1135 CHICAGO, IL 60690				
EXAMINER GARRETT, DAWN L				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
02/06/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/595,710

**Applicant(s)**

TAKADA ET AL.

**Examiner**

Dawn Garrett

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 18-31 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 05 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

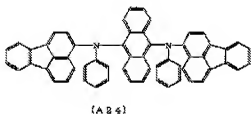
- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

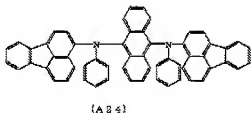
1. This Office action is responsive to the amendment filed November 21, 2008. Claims 1-17 are canceled. Claims 18, 19, 23, 25, 27, and 29 were amended. Claims 18-31 are pending.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The objection to claim 18 set forth in the last Office action (mailed August 25, 2008) is withdrawn due to the amendment.
4. The rejection of claims 18-22 under 35 U.S.C. 112, second paragraph, set forth in the last Office action is withdrawn due to the amendment.
5. The rejection of claims 17 under 35 U.S.C. 102(b) as being anticipated by Kikuchi et al. (JP 2000-56489) is withdrawn due to the cancellation of claim 17.
6. The rejection of claims 17 and 20 under 35 U.S.C. 102(b) as being anticipated by Hosokawa et al. (JP 2002-69044) is withdrawn due to the amendment.
7. The rejection of claim 24 under 35 U.S.C. 103(a) as being unpatentable over Hosokawa et al. (JP 2002-69044) is withdrawn due to the amendment.
8. The rejection of claim 17 under 35 U.S.C. 103(a) as being unpatentable over Oh et al. (US 2003/0118866 A1) is withdrawn due to the cancellation of claim 17.
9. Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosokawa et al. (JP 2002-69044).

Hosokawa et al. discloses hydrocarbon compounds for an organic electroluminescent element (see title). Hosokawa et al. discloses the following compound on page 8 of the patent document:



This compound is within the definition of instant formula (2). With regard to claim 19, since Hosokawa et al. discloses compounds within the instant formula (2) definition, the light emission properties (i.e., color) are considered inherent.

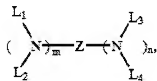
10. Claims 23 and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosokawa et al. (JP 2002-69044). Hosokawa et al. discloses hydrocarbon compounds for an organic electroluminescent element (see title). Hosokawa et al. discloses the following compound on page 8 of the patent document:



This compounds are within the definition of instant formula (3). Although Hosokawa et al. does not *exemplify* the method for making compounds A24 above, Hosokawa et al. does teach forming the inventive compounds using halogenated reactants and reactants with a nitride group along with metal catalysts (see patent document pages 13-14). It would have been obvious to

one of ordinary skill in the art at the time of the invention to have formed a compound of Hosokawa et al. using the same methods as set forth in claims 23-31, because Hosokawa et al. discloses final products according to instant formula (3) and reactant steps according to the instant formulas in order to form the final product. One would expect the methods taught by Hosokawa to be applicable in forming disclosed compounds A24. Furthermore, the modification of the process would have been within the capabilities of one skilled in the art. "Selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results" In re Burhans, 69 USPQ 330.

11. Claims 18-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh et al. (US 2003/0118866 A1). Oh et al. discloses the following general formula of compounds for an organic electroluminescent device:



In the above formula, L1-L4 may be substituted or unsubstituted aromatic groups (see par. 35). Z may be A1 wherein A1 includes aromatic hydrocarbon groups (see par. 31 and 32, and par 71-72). Oh et al. does not *exemplify* fluoranthene groups as the aromatic groups for two of L1-L4, but does generally teach aromatic groups having the required number of carbon atoms and similar groups to fluoranthene. It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected fluoranthene groups for two of L1-L4 in the compound, because one would expect the compound to result in a well-functioning material for a

device, since such a compound is within the group set forth by Oh et al. With regard to the method claims, Oh et al. teaches method steps using halogenated reactants and reactants with a nitrogen-containing group along with metal catalysts (see pages 16-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the compounds of Oh et al. using the same methods as set forth in claims 23-31, because Oh et al. generally discloses final products according to instant formula (3) and reactant steps according to the instant formulas in order to form the final product. One would expect the methods taught by Oh et al. to result in compounds suitable for the Oh et al. device. Furthermore, the modification of the process would have been within the capabilities of one skilled in the art. "Selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results" In re Burhans, 69 USPQ 330.

#### ***Response to Arguments***

12. Applicant's arguments filed November 21, 2008 have been fully considered but they are not persuasive.

With regard to Hosokawa (JP 2002-069044 A), applicant argues Hosokawa fails to disclose or suggest instant formula (2). Applicant asserts compound A24 discloses a single fused ring hydrocarbon as the Ar2 element located between the two nitrogen elements. The examiner respectfully disagrees with applicant's analysis of compound A24. Compound A24 comprises an anthracene corresponding to the instant Ar2 divalent group. Anthracene is a fused-ring aromatic hydrocarbon having 3 rings. The claims clearly recite Ar2 is comprised of a monocyclic or fused-ring aromatic hydrocarbon having 1 to 3 rings. The claim does not require specific divalent attachment points for the recited fused ring to be attached to the rest of the molecule.

Applicant's definition of a fused system in the remarks is not persuasive. With respect to applicant's remarks about A22 of Hosokawa, the examiner agrees that the compound is specifically excluded from the claim. The portion of the rejection directed to compound A22 has been removed.

Applicant argues with regard to the method claims that Hosokawa merely includes the use of a palladium-based catalyst. The examiner respectfully submits the claims recite a metal catalyst and palladium is a metal. Applicant further argues Hosokawa does not suggest the amount of metal or metal catalyst used or the specific compound which reacts. The examiner submits the claims do not require a specific amount of metal catalyst be present. It is further noted that only claim 29 recites "an equivalent amount" of reactants. The examiner submits with respect to this feature that the claim does not exclude extra amounts of reactants from being present also. As discussed in the rejection, Hosokawa et al. renders obvious the making of compounds according to Formula 3.

With regard to Oh et al., applicant argues Oh et al. discusses red luminescent layers. The examiner notes that claim 19 is directed to the compound being used in a green light emitting organic element and does not set forth a color for the compound or the light emitting layer. Furthermore, applicant only claims a material and a method for making a material. No devices are claimed. Applicant's argument that Oh et al. uses the compounds as a host and not a luminescent material is not persuasive to overcome the claims drawn to compounds and methods for making compounds. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of

performing the intended use, then it meets the claim. Furthermore, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

It is further noted that only claim 29 recites "an equivalent amount" of reactants. The examiner submits with respect to this feature that the claim does not exclude extra amounts of reactants from being present also. As discussed in the rejection, Oh et al. renders obvious the making of compounds according to Formula 3.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/  
Primary Examiner, Art Unit 1794